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Addendum No. 3 Invitation for Bid #2018-006 WASTEWATER TREATMENT PLANT OPERATIONS BUILDING RENOVATION

Date: 9/1/2017

From: Melissa Tillman, Buyer

RE: Addendum No. 3

This Addendum supplements and amends the original Invitation for Bid and shall be taken into account in preparing the bid and shall become a part of the Contract Documents. The Bidder shall indicate receipt of this Addendum on the Bid Form.

- 1. Specification 115313-4/2.3/B states that fume hoods are Constant Volume and then asks for no bypass to be provided. Generally, the bypass is required in a Constant Volume set-up to keep face velocity under control as sash is lowered. Can you confirm that a bypass is required/acceptable? The basis of design fume hood is Triatek FlowSafe and it has an airfoil opening at the bottom of the sash which allows air to flow through the fume hood when the sash is fully closed. Typical bypass fume hoods have an opening above the sash and are not acceptable.
- 2. Specification 115313-4/2.3/B/1 calls for electronic control unit that also monitors sash position and anticipated changes in face velocity caused by abrupt changes in sash position. We are trying to figure out what kind of sensor/unit is desired here. If hoods are running Constant Volume, then a control unit would not be needed for this purpose. Please advise. The basis of design fume hood is based upon a stable vortex. The control unit measures and controls the vortex to keep the vortex from collapsing regardless of sash movement or laboratory space airflow changes. It is not used to control the constant volume airflow.
- 3. Specification 115313-6/2.5/E/1 seems to be calling for a powder coated steel liner within the fume hoods. Generally, a polyresin liner is used within the fume hood as it is less susceptible to corrosion. Will polyresin liners be acceptable in the fume hoods on this project in lieu of powder coated sheet steel? The specification calls for a chemical-resistant coating for the interior and exterior of the fume hood. Typically this would be an epoxy or other chemical-resistant coating. Powder coating was not specified and is not acceptable. Polyresin liner is acceptable.
- 4. Specification 115313-6/2.5/I/3 calls for combination style sashes on fume hoods. This conflicts with the drawings which show vertical rising sashes. Please confirm fume hood sash style required. A combination sash shall have both vertical and horizontal moving panels. The drawings show a generic fume hood and do not indicate the exact panels as called out in the specifications.

- 5. Specification 115313-9/2.8/F,G,H call for a unit within the fume hood that is only produced by a single manufacturer. Other approved vendors will not build hood with moveable baffle system. Can you please confirm other hoods of approved manufacturers will be acceptable with the understanding that they comply with ASHRAE 110? Lab Crafters and Triatek make similar units. Other manufacturers must demonstrate that their fume hoods can maintain a stable vortex and how that is accomplished. Fume hoods shall be high performance, low flow, and constant volume with airfoils.
- 6. Specification 115313: Can you please confirm that fume hoods shall be pre-wired and pre-piped within the factory for single point connection by mechanical trades? Fume hoods can be pre-wired and pre-piped as much as possible while still allowing the unit to be shipped and installed per manufacturer's requirements. Electrical components shall be accessible from the front of the hood.
- 7. Can you please confirm we should be following 115313-10/3.5/8 for the electrical and services required within the fume hoods? Does each hood require DI, CA, G, VAC and duplex receptacle? This spec also mentions a pilot light. Is a blower switch supposed to be provided? Yes, each fume hood requires these services. Not sure what if referred to as a pilot light. The basis of design unit has alert indicators and monitors. The exhaust fan is not controlled at the fume hood, so no switch needs to be provided at the hood. A switch is required at the VFD location in the electrical room.
- 8. Laboratory Workstations: Specification 123553.11 outlines a specification for the freestanding laboratory work stations. This spec appears to reference the lab benches shown in elevations M, N, P & S on sheet A-413. We are trying to figure out exactly what the designer is looking for at these islands. The specified Enterprise system generally consists of full height benches that are pre-piped and pre-wired and plug into a ceiling service tile above the bench. The drawings appear to show four-legged tables with mobile cabinets below. Please answer the following questions or provide more details so we can price this accurately.
 - a. Should island benches be half height four-legged table assemblies or should they be full height pre-piped/pre-wired assemblies with above-counter shelving, etc.? These are intended to be built-in islands, pre-piped & pre-wired that are essentially tables. Their height requirement is that they are tall enough to facilitate the Kewaunee steel sitting mobile cabinets underneath (approximately 30-inches). The only island with the above-counter, reagent shelving is shown on elevation P/A-413. Reagent shelving to be 18" tall. See image below for an example of islands. This photo does not depict the desired shelving or built in plumbing, but it is a reference for the "chase" that needs to protect the other lines.



- b. If full height piped and wired is desired, please confirm what types of gases should be provided at the benches. See drawing P-106 for laboratory gas services and locations. Vac and CA are required.
- c. Please confirm number of tiers of shelving above island benches.1 tier on the island shown in elevation P. (18" high, 14" wide shelf)
- d. Please confirm configuration (doors, drawers, combination) of mobile cabinets below the bench. 4-drawer style.
- e. Please confirm mobile cabinets shall have counterweight and drawer interlock safety features to prevent tipping. Manufacturer to confirm tipping prevention features.
- f. Please confirm how services will be fed to the bench (typically ceiling service tile from above). The services to the island cabinets in the Certified Lab Prep Area, Room 214, shall be fed from below. The services will need to run down the lab wall into the first floor ceiling plenum. The services will then be fed up through the floor to the island so that a services enclosure from ceiling to cabinet is not needed within the lab room. This requirement is only needed for the two islands in Room 214. Services to the location drops from the second floor ceiling plenum shall be in a chase space behind the cabinets or inside piping enclosures on the walls.
- g. If pre-piped and pre-wired Enterprise system is desired please confirm if you would like single or shared frame tables. Single refer to image above.
- 9. Drawing sheet A-412 shows Chemical Storage Room 210 and notes coated steel adjustable shelves from floor to ceiling. Can you please provide elevations for this shelving area or at least provide desired width and number of shelves? Please also confirm this shelving shall be SEFA 8 compliant laboratory grade provided by the same manufacturer as the laboratory casework. Overall width and depth as indicated on plans. Provide in increments that will withstand heavy loading. 5 shelves per each wall, 18" deep with retaining lip. Shelving shall be SEFA 8 compliant lab grade.
- 10. Room 210: Chemical Storage plan view on G/A412 appears to show a smaller countertop in the space. If this is desired, please provide more information for accuracy. This should match the other islands in that it can accommodate the rolling shelves, if so desired. This island doesn't necessarily need to be bolted to the floor but could function more like a table.
- 11. Would Hamilton be accepted as an alternative manufacturer to basis of design Kewaunee products? The spec section states that alternate manufacturers can submit but must also include some of their capabilities and qualifications along with their submittal. See spec section 2.00 on page 123553.13 for what to include.
- 12. Specification 123553.11 describes what is desired for the freestanding workstations on this project. This does not match what is drawn and noted on the architectural drawings. Spec identifies a tubular, height adjustable table frame assembly; drawings note a steel angle assembly with a plate that is bolted to the floor. Please clarify which is correct the spec or drawings? Defer to the specs these were based on Kewaunee products.

- 13. Elevation P/A-413 in particular shows reagent shelves above the work surface countertop of that particular unit. However, the end view of that particular unit on elevation S/A-413, as well as the plan view of that unit, does show the reagent shelves. Please clarify the reagent shelving for this unit. That particular unit does need reagent shelving and that is the only unit that requires it. (18" high, 14" wide shelf)
- 14. Sheet C-101, indicates 150' of 4" foundation drain. This appears to run across the face of the addition and around the back of the building and up the side to the front of the building. It appears to run under an existing concrete dock to the front edge of the building. Is it the intent of the architect to run the drain up the side of the building, under the dock and stairs to the front? This is not indicated on the demo plan, c-100. The foundation drain begins on the northwest side where the existing control building meets the new concrete walkway (see elevation marker EL 522.0 on Sheet C-101). The drain is approximately 80 LF and terminates around the side of the building addition, where the building addition meets existing control building.
- 15. What are the existing HVAC controls? Johnson Controls.
- 16. Fire Alarm System: The drawings show a Fire Alarm Control Panel in Electrical Room 131, (refer to E-105, 284621.11-21A). The specifications state that the components shall be compatible with and operate as an extension of the existing system. Is the intent for the new additional devices to operate with the existing Control Panel (Radionics) or a new Control Panel that can communicate with the existing and new devices? If we are providing a new Control Panel, is there a required or preferred manufacturer? If we are to use the existing fire alarm control systems, please provide manufacturer name and model number. The design intent is for a new fire alarm controller for the entire building, for all new devices and to communicate with any existing devices to remain. The system must be non-proprietary. Acceptable manufacturers include: Vista Commercial, Silent Knight, Fire-Lite and Bosch Radionics.
- 17. Lighting Fixtures: (in reference to E-602) Are equal light fixtures to the Tamlite acceptable? Tamlite is exclusive to one vendor and would not permit competitive pricing for the Light Fixture package. Yes, equal light fixtures are acceptable.
- 18. Who is the manufacturer of the existing roof? The 2 high roofs which cover the second floor is Carlisle and the brand is Versico, installed in fall 2016 by Phase 2 Roofers. The 2 sections of low roof 1st floor on north side and south east corner is beloved to be firestone installed 2005 or 2006 by Woodall-Lang roofing.
- 19. In regards to phasing for project, will contractors have full access to second floor in order to complete 2nd floor renovations at one time? The contractor would have full access to 2nd floor. The current storage facilities will be moved as that is where most of the work is taking place and the conference room and break room would be made available.
- 20. Does the Contractor have to carry Builders Risk Insurance on the Project or is that under the City? The Contractor will have to carry the insurance, per the City's Risk Management Department.

Company Name:	Date:
Address:	
	_ Fax No.:
Authorized Signature:	Title:
Print Name:	E-mail:

NOTE: This addendum does not need to be printed off and submitted with the Bid Package, it only needs to be acknowledged on the Bid Form, PM-4, where indicated.